B. To the Claims

location; and

Applicants request that the Examiner enter the amendments to the claims set forth below. Claims 5-7, 10, 13-17, 21, 27, 29, 31, 35-38, 40, 43, 44-47, 52, 54-55, 57, 59, 61-63, 65, 67, 69-72, 74, 76-78, 83-86, 90-91, 96, 98-100, 106-112, 118, 124, 127-130 & 137-138 are amended. For the PTO's convenience, claims that remain unchanged are included below in order to allow the Examiner to review all pending claims from this response in their numerical order.

3. (Unchanged) A method of processing signals to control a presentation, said method comprising the steps of:

receiving a television signal containing television programming and communicating said television signal to a storage device;

receiving a first instruct signal which is effective to instruct a computer at a user station to supplement or complete said television programming at an output device; selecting one of:

- (1) a time at which to communicate said first instruct signal; and
- (2) a location to which to communicate said first instruct signal; communicating said first instruct signal at said selected time or to said selected

storing said television signal and said instruct signal at said storage device.

4. (Unchanged) The method of claim 3, further comprising one of the steps of:

embedding said first instruct signal in said television signal;

embedding a code or datum in said television programming that enables said computer to locate some processor code or control a presentation of said television programming in accordance with said first instruct signal;

communicating a program unit identification code to said storage device and storing said program unit identification code at a storage location associated with said television programming;

communicating to and storing at said storage device some information to evidence an availability, use, or usage of said television programming, said first instruct signal, or some processor code at a user station;

storing at said storage device a second instruct signal which is effective at a user station to process data to generate some output to form the basis for the supplementation or completion of said television programming;

storing at said storage device a second instruct signal which is effective at said user station to display a combined or sequential presentation of said television programming and a user specific data;

storing at said storage device a second instruct signal which is effective at said user station to process a user reaction to said television programming;

storing at said storage device a second instruct signal which is effective at a said user station to communicate to a remote station a query for information to be associated with said television programming or to enable display of said television programming;

storing at said storage device a second instruct signal which is effective to control said user station to receive information to be used in the supplementation or completion of said television programming;

storing at said storage device a second instruct signal which is effective at a user station to process a digital television signal; and

storing at said storage device a code or datum to serve as a basis for enabling an output device to display at least some of said television programming or said computer to process some processor code.



- 5. (Amended) The method of claim 3, wherein said selected location is in said television signal, said method further comprising the step of storing some information at said storage device that evidences one or more of:
 - (1) a title of a television program;
 - (2) a [proper] use of programming;
 - (3) a transmission station;
 - (4) a receiver station;
 - (5) a network;
 - (6) a broadcast station;
 - (7) a channel on a cable system;
 - (8) a time of transmission;
 - (9) a identification of an instruct signal;
 - (10) a source or supplier of data;
 - (11) a distributor, or an advertisement; and
 - (12) an indication of [copyright] a payment obligation.
- 6. (Amended) The method of claim 3, wherein said first instruct signal is embedded in said television signal, said method further comprising the steps of: selecting a second one from the group consisting of:
- (1) a datum that identifies a unit of computer software in said television signal;
- (2) [a datum that specifies some of a way to instruct receiver end equipment what specific programming to select to play or record other than that immediately at hand, how to load said specific programming on player or recorder equipment, when and how to play or record said specific programming other than immediately, how to modify said specific programming, what equipment or channel or channels to transmit said specific



programming on, when to transmit said specific programming, and how and where to file or refile or dispose of said specific programming;

- (3)] a datum that designates an addressed apparatus;
- [(4) a datum that specifies where, when, or how to locate a signal;
- (5) a datum that informs a processor of a fashion for identifying and processing a signal;]
 - [(6)] (3) a datum that is part of a decryption code;
- [(7)] (4) a comparison datum that designates a communication schedule; and

embedding the selected second one in said television signal.

7. (Amended) The method of claim 3, wherein said first instruct signal comprises processor code, said method further comprising the steps of:

selecting a second instruct signal, said second instruct signal being one from the group consisting of:

- (1) a switch control signal;
- (2) a timing control signal;
- (3) a locating control signal;
- (4) an instruct-to-contact signal that designates a remote receiver station;
- (5) an instruct-to-transfer signal that designates a unit of broadcast or cablecast programming;
- (6) an instruct-to-delay signal that designates a unit of broadcast or cablecast programming;
- (7) an instruct-to-decrypt or instruct-to-interrupt signal that designates a unit of programming and a way to decrypt or interrupt;
- (8) an instruct-to-enable or instruct-to-disable signal that designates an apparatus;

- (9) an instruct-to-record signal that designates a broadcast or cablecast program;
 - (10) an instruction signal that controls a multimedia presentation;
- (11) an instruction signal that governs a broadcast or cablecast receiver station environment;
 - (12) an instruct-to-power-on signal that designates a receiver;
 - (13) an instruct-to-tune signal that designates a receiver or a frequency;
 - (14) an instruct-to-coordinate signal that designates two apparatus;
- (15) an instruct-to-compare signal that designates a news transmission or a computer input;
- (16) an identifier signal that causes a computer to instruct a plurality of tuners each to tune to a broadcast or cablecast transmission;
- (17) an instruct-to-coordinate signal that designates two units of multimedia information and one of: (1) an output time and (2) an output place;
 - (18) an instruct-to-generate signal that designates an output datum;
 - (19) an instruct-to-transmit signal that designates a computer output;
 - (20) an instruct-to-overlay signal that designates a television image;
- (21) an instruct signal that designates a function to perform if a predetermined condition exists:
- (22) an instruct-to-enable-and-deliver signal that designates information that supplements a television program;
- (23) an instruct-to-transmit signal that designates a computer peripheral [storage] device;
 - (24) a code signal that designates a datum to remove or embed; and
 - (25) a signal addressed to a receiver station apparatus; and embedding said selected second instruct signal in said television signal.

(Unchanged) A method of generating and encoding signals to control a 8. presentation comprising the steps of:

receiving and storing a program that contains video information;

receiving an instruction, said instruction having effect to instruct a user station processor to generate or output information to supplement or complete said program;

encoding said instruction, said step of encoding translating said instruction to a first control signal with said effect; and

storing said first control signal in conjunction with said program.

9. (Unchanged) The method of claim 8, wherein supplemental program material is stored at the same location as said processor and said first control signal directs said processor to generate a video overlay based on said supplemental material that is coordinated with said video information in said program, said method further comprising the step of:

storing a second control signal in conjunction with said program and said first control signal from said step of encoding, said second control signal having effect at a user station to query a remote station for said supplemental programming or to receive said supplemental program material in a broadcast or cablecast transmission.

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(Amended) The method of claim 8, wherein said first control signal directs said processor to generate a video overlay that is to be coordinated with said video information in said program, said method further including [one] the step [from the group consisting] of:

[transmitting a combined video signal based on said program and said video overlay generated by said processor over a broadcast or cablecast network] to a plurality of receiver stations; and]

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transmitting [a combined video signal from said program and] said video overlay generated by said processor to a [co-located] video display.

- 11. (Unchanged) The method of claim 8, further comprising the steps of: receiving a second instruction, said second instruction being one of the group consisting of:
- (1) an instruction which is effective at a user station to generate some output to be associated with a product, service, or information presentation;
- (2) an instruction which is effective at a user station to display a combined or sequential presentation of a mass medium program and user specific data;
- (3) an instruction which is effective at a user station to process a user reaction to said program;
- (4) an instruction which is effective at a user station to communicate to a remote station a query for information to be associated with said program or to enable display of said program;
- (5) an instruction which is effective at a user station to receive information to form the basis of the supplementing or completion of said program;
- (6) an instruction which is effective at a user station to process a digital television signal; and
- (7) an instruction which is effective at a user station to serve as a basis for enabling an output device to display at least some of said program or for enabling said processor to process some processor code;

encoding said second instruction, said second step of encoding translating said second instruction to a second control signal, said second control signal for directing said processor to perform the specified effect indicated by said second instruction; and storing said second control signal in conjunction with said program.

12. (Unchanged) The method of claim 8, further including one step from the group consisting of:

embedding said first control signal in the non-visible portion of a television signal;

embedding a code in said program that enables a computer or controller to control a presentation of said program in accordance with said first control signal;

communicating a program unit identification code and storing said program unit identification code at a storage location associated with said program; and

communicating to and storing at a storage location associated with said program some information to evidence an availability, use, or usage of said program at a user station.

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13. (Amended) A method of processing signals in a system of stations including at least one transmitter station and at least one receiver station to control a mass medium programming presentation comprising the steps of:

receiving a signal containing [a data file or] unit of mass medium programming and communicating said signal to a storage device;

receiving one or more instruct signals which are effective at a broadcast or cablecast transmitter station to communicate said signal to a transmitter and at a receiver station to store said signal or present information contained in said signal at an output device;

communicating said one or more instruct signals to said storage device; and storing said one or more instruct signals at said storage device in association with said data file or unit of mass medium programming.

14. (Amended) The method of claim 13, wherein said [data file or] unit of mass medium programming comprises video, or audio, [or text,] said method further comprising one from the group consisting of:

embedding said one or more instruct signals in a television or radio signal; embedding a code in said data file or unit of mass medium programming that enables a processor or computer at a user station to receive or output information to supplement or complete said [data file or] unit of mass medium programming in accordance with said one or more instruct signals;

communicating a program unit identification code to said storage device and storing said program unit identification code at a storage location in said storage device associated with said [data file or] unit of mass medium programming;

communicating to and storing at said storage device some information to be processed at a user station to evidence an availability, use, or usage of video, audio, or text associated with said [data file or] unit of mass medium programming;

communicating to and storing at said storage device one or more second instruct signals which are effective at a user station to generate some output to supplement or complete said [data file or] unit of mass medium programming;

communicating to and storing at said storage device one or more second instruct signals which are effective to generate some output to be associated with said a, service, or information presentation;

communicating to and storing at said storage device one or more second instruct signals which are effective at a receiver station to display a combined or sequential presentation of a mass medium program and user specific data;

communicating to and storing at said storage device one or more second instruct signals which are effective to process a user reaction to said [data file or] unit of mass medium programming;



communicating to and storing at said storage device one or more second instruct signals which are effective to communicate to a remote station a query for information to be associated with said [data file or] unit of mass medium programming or to enable display of said [data file or] unit of mass medium programming;

communicating to and storing at said storage device one or more second instruct signals which are effective to control a user station to receive information to supplement or complete said [data file or] unit of mass medium programming;

communicating to and storing at said storage device one or more second instruct signals which are effective to process a digital television signal; and

communicating to and storing at said storage device a code or datum to serve as a basis for enabling an output device to display at least some of said [data file or] unit of mass medium programming or for enabling a processor to process some processor code.

15. (Amended) The method of claim 13, said method further comprising the steps of:

selecting one from the group consisting of:

- (1) a datum that identifies a unit of computer software in said signal containing a [data file or] unit of mass medium programming;
- (2) [a datum that specifies some of a way to instruct receiver end equipment what specific programming to select to play or record other than that immediately at hand, how to load said specific programming on player or recorder equipment, when and how to play or record said specific programming other than immediately, how to modify said specific, what equipment or channel or channels to transmit said specific on, when to transmit said specific programming, and how and where to file or refile or dispose of said specific programming;
 - (3)] a datum that designates an addressed apparatus in a user station;
 - [(4) a datum that specifies where, when, or how to locate a signal;



- (5) a datum that informs a processor of a fashion for identifying and processing a signal;]
 - [(6)] (3) a datum that is part of a decryption code;
- [(7)] (4) a comparison datum that designates a communication schedule; and

embedding said selected one in said signal containing a [data file or] unit of mass medium programming.

- 16. (Amended) The method of claim 13, further comprising the step of storing some information at said storage device to evidence an availability, use, or usage of said one or more instruct signals, said evidence information designating or identifying one or more of:
 - (1) a mass medium program;
 - (2) a [proper] use of programming;
 - (3) a transmission station;
 - (4) a receiver station;
 - (5) a network;
 - (6) a broadcast station;
 - (7) a channel on a cable system;
 - (8) a time of transmission;
 - (9) an instruct signal;
 - (10) a source or supplier of data;
 - (11) a distributor, or an advertisement; and
 - (12) an indication of [copyright] a payment obligation.
- 17. (Amended) The method of claim 13, wherein said one or more instruct signals comprise downloadable code, said method further comprising the steps of:



selecting a control signal, said control signal being one of:

- (1) a switch control signal;
- (2) a timing control signal;
- (3) a locating control signal;
- (4) an instruct-to-contact signal that designates a remote receiver station;
- (5) an instruct-to-transfer signal that designates a unit of broadcast or cablecast programming;
- (6) an instruct-to-delay signal that designates a unit of broadcast or cablecast programming;
- (7) an instruct-to-decrypt or instruct-to-interrupt signal that designates a unit of programming and a way to decrypt or interrupt;
- (8) an instruct-to-enable or instruct-to-disable signal that designates an apparatus;
- (9) an instruct-to-record signal that designates a broadcast or cablecast program;
 - (10) a control signal that controls a multimedia presentation;
- (11) a control signal that governs a broadcast or cablecast receiver station environment;
 - (12) an instruct-to-power-on signal that designates a receiver;
 - (13) an instruct-to-tune signal that designates a receiver or a frequency;
 - (14) an instruct-to-coordinate signal that designates two apparatus;
- (15) an instruct-to-compare signal that designates a news transmission or a computer input;
- (16) an identifier signal that causes a computer to instruct a plurality of tuners each to tune to a broadcast or cablecast transmission;
- (17) an instruct-to-coordinate signal that designates two units of multimedia information and one of: (1) an output time and (2) an output place;



- (18) an instruct-to-generate signal that designates an output datum;
- (19) an instruct-to-transmit signal that designates a computer output;
- (20) an instruct-to-overlay signal that designates a television image;
- (21) an instruct signal that designates a function to perform if a predetermined condition exists;
- (22) an instruct-to-enable-and-deliver signal that designates information that supplements a television program;
- (23) an instruct-to-transmit signal that designates a computer peripheral [storage] device;
 - (24) a code signal that designates a datum to remove or embed; and
- (25) a signal addressed to a receiver station apparatus; and embedding said selected control signal in said signal containing a [data file or] unit of mass medium programming.
- 18. (Unchanged) An apparatus for providing a mass medium programming presentation comprising:

an output device for outputting a mass medium programming presentation to a user;

a storage device operatively connected to said output device for storing and communicating mass medium program materials and one or more embedded instruct signals effective at the apparatus to supplement or complete said mass medium program materials based on stored data;

a detector operatively connected to said storage device for detecting said one or more embedded instruct signals; and

a processor operatively connected to said storage device, said output device, and said detector for processing data and controlling said storage device and said output

device to output said mass medium program materials and the supplemental or completion information in accordance with said embedded instruct signals.

19. (Unchanged) A transmitter station apparatus comprising:

a transmitter for transmitting a mass medium programming signal;

a storage device operatively connected to said transmitter for storing and outputting mass medium program materials and one or more instruct signals effective at a receiver station apparatus to supplement or complete said mass medium program materials based on stored data;

a detector operatively connected to said storage device for detecting said one or more instruct signals; and

a computer operatively connected to said storage device and said signal detector for controlling communication of said one or more instruct signals from said storage device to said transmitter.

20. (Unchanged) The transmitter station apparatus of claim 19, further comprising:

a signal generator operatively connected to said transmitter and said computer for receiving said one or more instruct signals and embedding said one or more instruct signals on mass medium programming signal.

- 21. (Amended) The method of claim 3, wherein said storage device comprises one or more storage locations in a network.
- 22. (Unchanged) The method of claim 3, wherein said storage device comprises a memory.

- 23. (Unchanged) The method of claim 22, wherein said memory comprises a tape.
- 24. (Unchanged) The method of claim 22, wherein said memory comprises a disk.
- 25. (Unchanged) The method of claim 3 further comprising the step of communicating one of said television signal and said instruct signal from a first part of said storage device to a second part of said storage device.
- 26. (Unchanged) The method of claim 25, further comprising the step of reorganizing the storage of said television signal and said instruct signal at said storage device.
- 27. (Amended) The method of claim 13, wherein said storage device comprises one or more storage locations in a network.
- 28. (Unchanged) The method of claim 13, wherein said storage device comprises a memory.
- 29. (Amended) The apparatus of claim 18, wherein said storage device comprises one or more storage locations in a network.
- 30. (Unchanged) The apparatus of claim 18, wherein said storage device comprises a memory.



- 31. (Amended) The transmitter station apparatus of claim 19, wherein said storage device comprises one or more storage locations in a network.
- 32. (Unchanged) The transmitter station apparatus of claim 19, wherein said storage device comprises a memory.
- 33. (Unchanged) A method of processing signals to control at least one of a television and a media presentation comprising the steps of:

receiving a television signal containing first television programming and communicating said television signal and said first television programming to a storage device, said first television programming including audio;

receiving processor instructions which are capable of instructing a computer to present, with said first television programming at at least one output device, information to at least one of complete and supplement said first television programming;

selecting at least one of:

- (1) at least one first time at which to communicate said processor instructions; and
- (2) at least one first location to which to communicate said processor instructions;

communicating said processor instructions to said storage device based on said step of selecting; and

storing said television signal, said first television programming, and said processor instructions at said storage device concurrently.

34. (Unchanged) The method of claim 33, further comprising at least one of the steps of:

embedding said processor instructions in said television signal;

embedding one of a code and a datum in said first television programming that enables said computer to at least one of locate said processor instructions and to control a presentation of said first television programming in accordance with said processor instructions;

communicating a program unit identification code to said storage device and storing said program unit identification code at a storage location associated with said television programming;

communicating to and storing at said storage device information to evidence at least one of an availability, use, and usage of at least one of said first television programming and said processor instructions at a subscriber station;

storing at said storage device at least one instruction which is effective at a subscriber station to generate output to be associated with said television programming;

storing at said storage device at least one instruction which is effective at a subscriber station to display one of a combined and a sequential presentation of said television programming and a subscriber specific datum;

storing at said storage device at least one instruction which is effective at a subscriber station to process a subscriber reaction to said television programming;

storing at said storage device at least one instruction which is effective at a subscriber station to one of communicate to a remote station a query in respect of information to be associated with said television programming and to enable display of said television programming;

storing at said storage device at least one instruction which is effective to control a subscriber station to receive information to supplement said television programming;

storing at said storage device at least one instruction which is effective at a subscriber station to process a digital television signal; and

storing at said storage device at least one of a code and a datum to serve as a basis for one of enabling an output device to display at least a portion of said first television programming and enabling said computer to process said processor instructions.

48 Cont. 35. (Amended) The method of claim 33, wherein said selected at least one first location is in said television signal, said method further comprising the step of: storing information at said storage device that evidences at least one from the group consisting of:

- (1) a title of a television program;
- (2) a [proper] use of programming;
- (3) a transmission station;
- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) an identification of an instruct signal;
- (10) at least one of a source and supplier of data;
- (11) at least one of a distributor and an advertisement; and
- (12) an indication of [copyright] a payment obligation.
- 36. (Amended) The method of claim 33, wherein said processor instructions are embedded in said television signal, said method further comprising the steps of:

selecting at least one datum from the group consisting of:

(1) a datum that identifies processor instructions;



- (2) [a datum that specifies a method to instruct receiver end equipment on at least one of (i) what specific programming to at least one of select, play and record, (ii) how to load said specific programming on at least one of player and recorder equipment, (iii) when and how to at least one of play and record said specific programming other than immediately, (iv) how to modify said specific programming, (v) which one of equipment, channel and channels to transmit said specific programming on, (vi) when to transmit said specific programming, and (vii) at least one of how and where to one of file, refile and dispose of said specific programming;
 - (3)] a datum that designates an addressed apparatus;
- [(4) a datum that specifies at least one of where, when, and how to locate said television signal;
- (5) a datum that informs a processor of a fashion for identifying and processing said television signal;
 - (6)] (3) a datum that is part of a decryption code;
- [(7)] (4) a datum to be compared to a communication schedule; and embedding said selected at least one datum in said television signal; and storing said selected at least one datum at said storage device concurrently with said first television programming and said code.
- 37. (Amended) The method of claim 33, wherein said processor instructions include at least one of a code and a datum which enables communication of said processor instructions in a network, said method further comprising the steps of:

selecting an instruction signal, said instruction signal including at least one from the group consisting of:

- (1) a switch control signal;
- (2) a timing control signal;
- (3) a locating control signal;

- (4) an instruct-to-contact signal that designates a remote receiver station;
- (5) an instruct-to-transfer signal that designates one of broadcast and cablecast programming;
- (6) an instruct-to-delay signal that designates one of broadcast and cablecast programming;
- (7) at least one of an instruct-to-decrypt and an instruct-to-interrupt signal that designates programming and a method to one of decrypt and interrupt;
- (8) at least one of an instruct-to-enable and an instruct-to-disable signal that designates an apparatus;
- (9) an instruct-to-record signal that designates one of a broadcast and a cablecast program;
 - (10) an instruction signal that controls a media presentation;
- (11) an instruction signal that governs one of a broadcast and a cablecast receiver station environment;
 - (12) an instruct-to-power-on signal that designates a receiver;
- (13) an instruct-to-tune signal that designates at least one of a receiver and a frequency;
 - (14) an instruct-to-coordinate signal that designates two apparatus;
- (15) an instruct-to-compare signal that designates one of a news transmission and a computer input;
- (16) an identifier signal that causes a computer to instruct a plurality of tuners each to tune to one of a broadcast and a cablecast transmission;
- (17) an instruct-to-coordinate signal that designates two units of media information and one of: (1) an output time and (2) an output place;
 - (18) an instruct-to-generate signal that designates an output datum;
 - (19) an instruct-to-transmit signal that designates a computer output;
 - (20) an instruct-to-overlay signal that designates a television image;



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- (21) an instruct-that-if signal that designates a function to perform if a predetermined condition exists;
- (22) an instruct-to-enable-and-deliver signal that designates information that supplements a television program;
- (23) an instruct-to-transmit signal that designates a computer peripheral [storage] device;
 - (24) a code signal that designates a datum to one of remove and embed; and
 - (25) a signal addressed to a receiver station apparatus;
- (26) an instruct-to-store signal that designates at least a portion of a program to be at least one of broadcast and cablecast;
- (27) an instruct-to-transmit signal that designates at least a portion of a program to be at least one of broadcast and cablecast;

embedding said selected instruction signal in said television signal; and storing said selected instruction signal at said storage device concurrently with said television programming and said processor instructions.

38. (Amended) A method of embedding processor instructions to control a presentation comprising the steps of:

receiving a program that contains video information, said video information including at least three [full screen] video images to be outputted at a subscriber station in a predetermined sequence;

receiving said processor instructions and at least one control instruction, said processor instructions capable of instructing a subscriber station apparatus to at least one of process and output subscriber specific information pertaining to said program, said at least one control instruction capable of causing said subscriber station apparatus to operate under control of said processor instructions;

commencing communication of said program to a storage device;

embedding said processor instructions and said at least one control instruction in a signal containing said program while said signal and said program are being communicated; and

storing said signal containing said program, said embedded processor instructions, and said embedded at least one control instruction in said storage device.

39. (Unchanged) The method of claim 38, wherein additional program material is to be at least one of processed and outputted at said subscriber station to at least one of complete and supplement said program, said method further comprising the step of:

storing a control signal, said control signal being capable of causing said subscriber station to at least one of (i) query a remote station for said additional program material, and (ii) receive said additional program material in at least one of a broadcast and a cablecast transmission.

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40. (Amended) The method of claim 38, wherein said processor instructions direct said subscriber station to generate at least one video overlay that is to be coordinated with said video information in said program, said method further comprising the step of:

storing a control signal in conjunction with said program and said processor instructions, said control signal capable of causing said subscriber station to [perform at least one of (i) transmitting a combined video signal from said program and said video overlay generated by at least one processor over at least one of a broadcast and cablecast network to a plurality of receiver stations and (ii) outputting] output at a video display a combined video image of (a) at least a portion of said program and (b) said video overlay generated by said at least one processor.

- 41. (Unchanged) The method of claim 38, further comprising the steps of: receiving at least one additional processor instruction, said at least one additional processor instruction including at least one of the group consisting of:
- (1) an instruction which is capable of enabling said subscriber station to generate output information content to be associated with said program;
- (2) an instruction which is capable of enabling said subscriber station to generate output to be associated with at least one of a product and a service promoted in said presentation;
- (3) an instruction which is capable of enabling said subscriber station to display, in said presentation, at least one of a combined and a sequential output of mass medium programming and at least one subscriber station specific datum;
- (4) an instruction which is capable of enabling said subscriber station to respond to a subscriber reaction inputted by at least one of at least one processor and a computer;
- (5) an instruction which is capable of enabling said subscriber station to communicate to a remote station a query for information to enable a display of said presentation;
- (6) an instruction which is capable of enabling said subscriber station to communicate to a remote station an order for at least one of a product and a service at least one of (i) promoted in said video information and (ii) based on a viewer reaction;
- (7) an instruction which is capable of enabling said subscriber station to process a digital television signal; and
- (8) an instruction which is capable of enabling said subscriber station to process said processor instructions;

embedding said at least one additional processor instruction, said step of embedding translating said at least one additional processor instruction to at least one control signal, said at least one control signal for directing at least one processor; and storing said at least one control signal in conjunction with said program.

42. (Unchanged) The method of claim 38, further having at least one step from the group consisting of:

embedding said processor instructions in a portion of a television signal which is unviewable on a normally tuned television set;

embedding code in said program that enables at least one of a computer and a controller to control said presentation of said program in accordance with said processor instructions;

communicating a program unit identification code and storing said program unit identification code at a storage location associated with said program; and

communicating to and storing at a storage location associated with said program information to evidence at least one of an availability, use, and usage of said program at said subscriber station.

43. (Amended) A method of processing signals to control a mass medium programming presentation comprising the steps of:

receiving a signal containing at least one of data and mass medium programming to be outputted in said mass medium programming presentation and communicating said signal to a storage device;

receiving processor instructions which are capable of controlling a receiver station to present <u>first</u> information contained in said signal at an output device and to process a subscriber reaction to <u>second</u> information contained in said signal;

communicating said processor instructions to said storage device;

receiving at least one first instruction signal which is effective at one of a broadcast and a cablecast transmitter station to communicate said signal and said processor instructions to a transmitter;



communicating said at least one first instruction signal to said storage device; and storing said at least one first instruction signal and said processor instructions at said storage device in association with said at least one of said data and said mass medium programming.

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44. (Amended) The method of claim 43, wherein [one of said data and] said mass medium programming comprises one of video, and audio, [and text,] said method further comprising at least one step from the group consisting of:

embedding said at least one first instruction signal in said signal;

embedding a code in [one of said data and] said mass medium programming that enables a computer to one of receive and output information to supplement [one of said data and] said mass medium programming in accordance with said at least one first instruction signal;

communicating a program unit identification code to said storage device and storing said program unit identification code at a storage location associated with [one of said data and] said mass medium programming presentation;

communicating to and storing at said storage device information to be processed at a subscriber station to evidence one of an availability, use, and usage of one of video, audio, and text associated with at least [one of said data and] said mass medium programming presentation;

communicating to and storing at said storage device said at least one first instruction signal which is effective at a subscriber station to select [one of said data and] said mass medium programming presentation;

communicating to and storing at said storage device said at least one first instruction signal which is effective at a subscriber station to generate output to be associated with one of said data and said mass medium programming;

communicating to and storing at said storage device said at least one first instruction signal which is effective to generate output to be associated with one of a product, a service, and an information presentation;

communicating to and storing at said storage device said at least one first instruction signal which is effective to display one of a combined and a sequential presentation of a mass medium program and a subscriber specific datum;

communicating to and storing at said storage device said at least one first instruction signal which is effective to process a subscriber reaction to said mass medium programming presentation;

communicating to and storing at said storage device said at least one first instruction signal which is one of: (i) effective to communicate to a remote station a query in respect of information to be associated with [one of said data and] said mass medium programming and (ii) effective to display of [one of said data and] said mass medium programming;

communicating to and storing at said storage device said at least one first instruction signal which is effective to control a subscriber station to receive information to supplement [one of said data and] said mass medium programming; and

communicating to and storing at said storage device one of a code and datum to one of serve as a basis for enabling an output device to display one of at least a portion of said data and said mass medium programming and a processor to process said processor instructions.

45. (Amended) The method of claim 43, said method further comprising the steps of:

selecting at least one from the group consisting of:

(1) a datum that identifies computer software in a programming signal;

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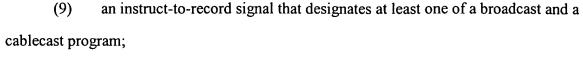
- (2) [a datum that specifies a method to instruct receiver end equipment on at least one of (i) what specific programming to at least one of select, play and record, (ii) how to load said specific programming on at least one of player and recorder equipment, (iii) when and how to at least one of play and record said specific programming other than immediately, (iv) how to modify said specific programming, (v) which one of equipment, channel and channels to transmit said specific programming on, (vi) when to transmit said specific programming, and (vii) at least one of how and where to one of file, refile and dispose of said specific programming;
 - (3)] a datum that designates an addressed apparatus;
- [(4) a datum that specifies at least one of where, when, and how to locate a signal;
- (5) a datum that informs a processor of a fashion for identifying and processing a signal;
 - (6)] (3) a datum that is part of a decryption code;
- [(7)] (4) a datum to be compared to a communication schedule; and embedding said selected at least one datum in said signal; and storing said selected at least one datum at said storage device concurrently with said at least one first instruction signal.
- 46. (Amended) The method of claim 43, further comprising the step of: storing at said storage device concurrently with said at least one first instruction signal information to evidence one of an availability, use, and usage of said at least one first instruction signal, said evidence information one of designating and identifying at least one of:
 - (1) a mass medium program;
 - (2) a [proper] use of programming;
 - (3) a transmission station;



- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) an instruct signal;
- (10) a source or supplier of data;
- (11) one of a distributor and an advertisement; and
- (12) an indication of [copyright] a payment obligation.
- 47. (Amended) The method of claim 43, wherein said at least one first instruction signal comprises downloadable code, said method further comprising the steps of:

selecting at least one second instruction signal, said at least one second instruction signal including at least one from the group consisting of:

- (1) a switch control instruction;
- (2) a timing control instruction;
- (3) a locating control signal;
- (4) an instruct-to-contact signal that designates a remote receiver station;
- (5) an instruct-to-transfer signal that designates one of broadcast and cablecast programming;
- (6) an instruct-to-delay signal that designates one of broadcast and cablecast programming;
- (7) at least one of an instruct-to-decrypt and an instruct-to-interrupt signal that designates programming and a way to at least one of decrypt and interrupt;
- (8) at least one of an instruct-to-enable and instruct-to-disable signal that designates an apparatus;



- (10) a control signal that controls a media presentation;
- (11) a control signal that governs one of a broadcast and a cablecast receiver station environment;
 - (12) an instruct-to-power-on signal that designates a receiver;
 - (13) an instruct-to-tune signal that designates one of a receiver and a frequency;
 - (14) an instruct-to-coordinate signal that designates at least two apparatus;
- (15) an instruct-to-compare signal that designates at least one of a news transmission and a computer input;
- (16) an identifier signal that causes a computer to instruct a plurality of tuners each to tune to one of a broadcast and a cablecast transmission;
- (17) an instruct-to-coordinate signal that designates two units of media information and one of: (1) an output time and (2) an output place;
 - (18) an instruct-to-generate signal that designates at least one output datum;
 - (19) an instruct-to-transmit signal that designates at least one computer output;
 - (20) an instruct-to-overlay signal that designates at least one television image;
- (21) an instruct-that-if signal that designates a function to perform if a predetermined condition exists;
- (22) an instruct-to-enable-and-deliver signal that designates information that at least one of completes and supplements a television program;
- (23) an instruct-to-transmit signal that designates a computer peripheral [storage] device;
 - (24) a code signal that designates a datum to one of remove and embed; and
 - (25) a signal addressed to a receiver station apparatus;
- (26) an instruct-to-store signal that designates at least a portion of a program to be at least one of broadcast and cablecast; and

(27) an instruct-to-transmit signal that designates at least a portion of a program to be at least one of broadcast and cablecast; and embedding said selected at least one second instruction signal in said signal; and storing said selected at least one second instruction signal at said storage device concurrently with said at least one first instruction signal.

48. (Unchanged) A transmitter station apparatus comprising:

a transmitter for transmitting a mass medium programming signal comprising mass medium program materials, downloadable code, and at least one instruction signal;

a storage device operatively connected to said transmitter for storing and outputting said mass medium program materials, said downloadable code, and said at least one instruction signal;

a control signal detector operatively connected to said storage device for detecting said at least one instruction signal; and

a computer operatively connected to said storage device and said control signal detector for controlling communication of one of said mass medium program materials and said downloadable code on the basis of said at least one instruction signal.

- 49. (Unchanged) The transmitter station apparatus of claim 48, wherein said computer controls said storage device to output said mass medium program materials and said downloadable code to said transmitter on the basis of said at least one instruction signal.
- 50. (Unchanged) The transmitter station apparatus of claim 48, wherein said computer is operatively connected to said transmitter for communicating said downloadable code, said apparatus further comprising:

a signal generator operatively connected to said computer and said transmitter for receiving said downloadable code and embedding said downloadable code on said mass medium programming signal.

- 51. (Unchanged) The transmitter station apparatus of claim 48, further comprising a switch operatively connected to said transmitter, said storage device, and said computer for receiving and communicating at least said mass medium program materials on the basis of control instructions communicated by said computer.
- 52. (Amended) The method of claim 33 wherein said storage device includes at least one of a tape and a disk, said method further comprising the steps of: communicating said television signal, said first television programming, and said processor instructions to said at least one of [said] a tape and [said] a disk; and storing said television signal, said first television programming, and said processor instructions at said at least one of [said] a tape and [said] a disk concurrently.
- 53. (Unchanged) The method of claim 33, further comprising the step of: receiving at least one control instruction which operates to output said television signal, said first television programming, and said processor instructions from said storage device.
- 54. (Amended) The method of claim 53, wherein said storage device includes one or more storage locations in a network having at least one transmitter station and at least one receiver station, said method further comprising the step of: storing said at least one control instruction in said network.

55. (Amended) The method of claim 54, wherein said at least one control instruction includes at least one identifier which identifies at least one of said first television programming and said processor instructions, said method further comprising the step of:

embedding <u>a portion of</u> said at least one control instruction in at least one of said television signal and said processor instructions.

- 56. (Unchanged) The method of claim 54, wherein said at least one control instruction includes a transmission schedule, said method further comprising the step of: communicating said transmission schedule to a computer.
- 57. (Amended) The method of claim 33, wherein said first television programming is [of] to be outputted for a duration of time in said at least one of a television and a media presentation, only a portion of said duration of time containing a time interval of specific relevance and information to at least one of complete and supplement said first television programming is to be presented [at said at least one output device] within said time interval of specific relevance, said method further comprising the step of:

embedding at least one of said processor instructions within a part of said television signal which [contains] is to be outputted from said storage device within said duration of time [of said first television programming].

58. (Unchanged) The method of claim 57, wherein, based on said step of selecting said method further comprises the step of:

embedding said at least one of said processor instructions in a portion of said television signal which is inaudible to a listener when said first television programming is outputted at said at least one output device.



59. (Amended) The method of claim 57, wherein [said duration of said first television programming includes] a multiplicity of video images is to be displayed during said duration of time in a predetermined sequence at said at least one output device, and wherein, based on said step of selecting said method further comprises the step of:

embedding said at least one of said processor instructions in a portion of said television signal which is unviewable by a viewer when said first television programming is outputted at said at least one output device.

- 60. (Unchanged) The method of claim 59, wherein said multiplicity of video images includes full motion video.
- 61. (Amended) The method of claim 57, wherein, based on said step of selecting said method further comprises the step of:

embedding said at least one of said processor instructions in a portion of said television signal which is to be outputted from said storage device before the end of said duration of time.

62. (Amended) The method of claim 57, wherein (i) at least a first of said processor instructions is capable of instructing said computer to generate information to [at least one of] complete [and supplement] said first television programming and (ii) at least a second of said processor instructions is capable of outputting from said computer [at least] a portion of said information to [at least one of] complete [and supplement] said first television programming, said method further comprising the steps of:

selecting at least one of:

(1) a second time at which to communicate said processor instructions, and



(2) a second location to which to communicate said processor instructions; and

communicating one of (i) said at least said first of said processor instructions and (ii) said at least said second of said processor instructions to said storage device based on said step of selecting at least one of said second time and said second location.

63. (Amended) The method of claim 62, wherein second television programming is received, only a portion of said second television programming containing a second time of specific relevance, and wherein said at least said first of said processor instructions is capable of instructing said computer to generate information to [at least one of] complete [and supplement] said second television programming, said method further comprising the steps of:

communicating said second television programming to said storage device; and storing said second television programming at said storage device concurrently with said television signal, said first television programming and said processor instructions.

64. (Unchanged) The method of claim 63, wherein said first television programming and said second television programming are stored in contiguous television programming in said television signal.

65. (Amended) The method of claim 33, wherein said first television programming includes a multiplicity of video images to be outputted in a predetermined sequence at said at least one output device for a period of time, <u>only</u> a portion of said period of time including a plurality of time intervals of specific relevance,

a first portion of said information to at least one of complete and supplement said first television programming is to be presented at said at least one output device within a first of said plurality of time intervals of specific relevance,

a second portion of said information to at least one of complete and supplement said first television programming is to be presented at said at least one output device within a second of said plurality of time intervals of specific relevance,

said second of said plurality of time intervals of specific relevance being subsequent to said first of said plurality of time intervals of specific relevance,

a first of said processor instructions is capable of presenting at said at least one output device said first portion of said information to at least one of complete and supplement said first television programming and a second of said processor instructions is capable of presenting at said at least one output device said second portion of said information to at least one of complete and supplement said first television programming,

based on said step of selecting at least one of (i) said at least one first time and (ii) said at least one first location, said first and said second of said processor instructions are embedded in a portion of said television signal which is outputted [from] at said at least one output device concurrently with said audio and said multiplicity of video images,

said first of said processor instructions is embedded in a portion of said television signal which contains television programming that is outputted by said at least one output device before the end of said first of said plurality of time intervals of specific relevance, and

said second of said processor instructions is embedded in a portion of said television signal which contains television programming that is outputted by said at least one output device before the end of said second of said plurality of time intervals of specific relevance.

66. (Unchanged) The method of claim 33, wherein said processor instructions generate information to at least one of complete and supplement said first television programming by processing data, said method further comprising the steps of: receiving said data; communicating said data to said storage device; and storing said data.

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67. (Amended) The method of claim 38, wherein said storage device includes at least one of a tape and a disk, said method further comprising the steps of: communicating a television program, said video information, and said processor instructions to said at least one of [said] a tape and [said] a disk; and storing said television program, said video information, and processor

storing said television program, said video information, and processor instructions, and said at least one control instruction, at said at least one of [said] <u>a</u> tape and [said] <u>a</u> disk concurrently.

- 68. (Unchanged) The method of claim 38, further comprising the step of: receiving at least one control signal which operates to output said program, said video information, said processor instructions, and said at least one control instruction from said storage device.
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69. (Amended) The method of claim 68, wherein said storage device includes one or more storage locations in a network having at least one transmitter station and at least one receiver station, said method further comprising the step of: storing said at least one control signal in said network.

70. (Amended) The method of claim 69, wherein said at least one control signal includes at least one identifier which identifies at least one of said program and said processor instructions, said method further comprising the step of:

[embedding] <u>adapting said network to compare a said at least one control signal</u> [in said signal containing said program] <u>to information stored in said storage device</u>.

71. (Amended) The method of claim 69, wherein said at least one control [instruction] signal includes a transmission schedule, said method further comprising the step of:

communicating said transmission schedule to a computer.

72. (Amended) The method of claim 38, wherein said video information is [of] to be outputted for a duration of time in said presentation, only a portion of said duration of time containing a time interval of specific relevance and said subscriber specific information is to be outputted at said subscriber station at at least one output device within said time interval of specific relevance, said method further comprising the step of:

embedding at least one of said processor instructions within a part of said signal which contains said duration of said video information.

- 73. (Unchanged) The method of claim 72, further comprises the step of:
 embedding said at least one of said processor instructions in an audio portion of
 said program which is inaudible to a listener when said video information is outputted at
 said at least one output device.
- 74. (Amended) The method of claim 72, wherein [said duration of] said video information includes full motion video, said method further comprising the step of:

embedding said at least one of said processor instructions in a portion of said program which is outputted from said storage device while said full motion video is outputted at said at least one output device.

75. (Unchanged) The method of claim 74, wherein full motion video is communicated in a television signal and said at least one of said processor instructions is embedded in an unviewable and inaudible portion of said television signal.

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- 76. (Amended) The method of claim 72, further comprising the step of: embedding said at least one of said processor instructions in a portion of said signal which is to be outputted from said storage device before the end of said [video information contained in said] duration [is outputted] of time.
- 77. (Amended) The method of claim 72, wherein (i) at least a first of said processor instructions is capable of instructing said computer to generate information to [at least one of] complete [and supplement] said video information and (ii) at least a second of said processor instructions is capable of outputting from said computer [at least] a portion of said information to [at least one of] complete [and supplement] said video information, said method further comprising the steps of:

selecting at least one of:

- (1) at least one time at which to communicate said processor instructions; and
- (2) at least one location to which to communicate said processor instructions; and

embedding at least one of said at least a first of said processor instructions and said at least a second of said processor instructions in said signal based on said step of selecting at least one of said at least one time and said at least one location.



78. (Amended) The method of claim 77, wherein additional video is received, only a portion of said additional video containing a second time interval of specific relevance, and wherein said at least said first of said processor instructions is capable of instructing said computer to generate information to [at least one of] complete [and supplement] said additional video, said method further comprising the steps of:

communicating said additional video to said storage device; and storing said additional video at said storage device concurrently with said program, said video information, said processor instructions, and said at least one control instruction.

- 79. (Unchanged) The method of claim 78, wherein said additional video is stored in said storage device in said program immediately following said video information in said program.
- 80. (Unchanged) The method of claim 38, wherein said at least three video images are to be outputted at at least one output device at said subscriber station for a period of time, only a portion of said period of time including a plurality of time intervals of specific relevance,

a first portion of said subscriber specific information is to be outputted at said at least one output device concurrently with at least a first of said at least three video images within a first of said plurality of time intervals of specific relevance,

a second portion of said subscriber specific information is to be outputted at said at least one output device with at least a second of said at least three video images within a second of said plurality of time intervals of specific relevance,

said second of said plurality of time intervals of specific relevance being subsequent to said first of said plurality of time intervals of specific relevance,

a first of said processor instructions is capable of outputting at said at least one output device said first portion of said subscriber specific information and a second of said processor instructions is capable of outputting at said at least one output device said second portion of said subscriber specific information, and

said first and said second of said processor instructions are embedded in a portion of said signal which is outputted from said at least one output device at a time when said at least one output device displays at least one of said three video images,

said first of said processor instructions is embedded in a portion of said signal which is outputted by said at least one output device before the end of said first of said plurality of time intervals of specific relevance, and

said second of said processor instructions being embedded in a portion of said signal which is outputted by said at least one output device before the end of said second of said plurality of time intervals of specific relevance.

81. (Unchanged) The method of claim 38, wherein said processor instructions generate at least a portion of said subscriber specific information by processing data, said method further comprising the steps of:

receiving said data; communicating said data to said storage device; and storing said data.

82. (Unchanged) The method of claim 33, further comprising the steps of: receiving first data; communicating said first data to said storage device; and storing said first data.

12/ Cn/ 83. (Amended) The method of claim 82, wherein said first television programming is [of] to be outputted for a duration of time in said at least one of a television and a media presentation, only a portion of said duration of time containing a time interval of specific relevance, said first data are to be processed to generate second data, and said second data are to serve as a basis for selecting said information to at least one of complete and supplement said first television programming, said method further comprising the step of:

including in said processor instructions at least a first timing control instruction which is capable of causing a computer to process at least one of said first data at a specific time.

- 84. (Amended) The method of claim 83, [wherein said at least said first timing control instruction is capable of causing said computer to query a remote transmitter station for said at least one of said first data before said first television programming is outputted from said storage device] wherein said specific time is a scheduled time, said method further comprising the step of receiving and storing at least a portion of a schedule containing said specific time.
- 85. (Amended) The method of claim 83, wherein said at least [said] a first timing control instruction is capable of causing said computer to select said at least one of said first data from at least one of a broadcast and a cablecast transmission before said first television programming is outputted from said storage device.
- 86. (Amended) The method of claim 83, wherein said at least said [first] a timing control instruction is capable of causing said computer to process said first data and generate at least one of said second data before the portion of said television signal

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containing the end of said time interval of specific relevance is outputted from said storage device.

- 87. (Unchanged) The method of claim 83, further comprising the step of: including in said processor instructions at least a second timing control instruction which is capable of delivering to said at least one output device during said time interval of specific relevance said information to at least one of complete and supplement said first television programming.
- 88. (Unchanged) The method of claim 83, further comprising the step of: including in said processor instructions at least one timing control instruction which is capable of delivering said first television programming to said at least one output device.
 - 89. (Unchanged) The method of claim 38, further comprising the steps of: receiving first data; communicating said first data to said storage device; and storing said first data.



90. (Amended) The method of claim 89, wherein said program includes television programming [of] to be outputted for a duration of time in said presentation, only a portion of said duration of time containing a time interval of specific relevance, said first data are to be processed to generate second data, and said second data are to serve as a basis for selecting said subscriber specific information, said method further comprising the step of:

122 Concl. including in said processor instructions at least a first timing control instruction which is capable of causing a computer to process at least one of said first data at a specific time.

- 91. (Amended) The method of claim 90, wherein [said at least said first timing control instruction is capable of causing said computer to query a remote transmitter station for said at least one of said first data before said television programming is outputted from said storage device.] said specific time is a scheduled time, said method further comprising the step of receiving and storing at least a portion of a schedule containing said specific time.
- 92. (Unchanged) The method of claim 90, wherein said at least said first timing control instruction is capable of causing said computer to select said at least one of said first data from at least one of a broadcast and a cablecast transmission before said television programming is outputted from said storage device.
- 93. (Unchanged) The method of claim 90, wherein said at least said first timing control instruction is capable of causing said computer to process said first data and generate at least one of said second data before a portion of a television signal containing the end of said time interval of specific relevance is outputted from said storage device.
- 94. (Unchanged) The method of claim 90, further comprising the step of: including in said processor instructions and said at least one control instruction at least a second timing control instruction which is capable of delivering to at least one output device at said subscriber station, during said time interval of specific relevance, information to at least one of complete and supplement said television programming.

95. (Unchanged) The method of claim 90, further comprising the step of: including in said processor instructions at least one timing control instruction which is capable of delivering said television programming to said at least one output device.

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96. (Amended) A method of processing signals to control a multimedia presentation comprising the steps of:

receiving a television signal containing television programming and communicating said television signal and said television programming to at least one storage device, said television programming [consisting of] comprising audio and a plurality of video images to be displayed in at least one predetermined sequence, said at least one predetermined sequence including full motion video;

receiving at least one first instruction signal which is capable of instructing a computer to conduct a procedure of at least one of inputting and responding to a [viewer] subscriber reaction to said television programming;

selecting at least one of:

- (1) at least one time at which to communicate said first instruction signal; and
- (2) at least one first location to which to communicate said first instruction signal;

communicating said at least one first instruction signal at least one of (i) at said at least one selected time and (ii) to said selected at least one first location, based on said step of selecting; and

storing said television signal, said television programming, and said at least one first instruction signal at said at least one storage device concurrently.

97. (Unchanged) The method of claim 96, further comprising at least one of the steps of:

embedding said first instruction signal in said television signal;

embedding at least one of a first code and a first datum in said television programming that enables said computer to locate at least one of a second code and a second datum;

communicating a program unit identification code to said storage device and storing said program unit identification code at a storage location associated with said television programming;

communicating to and storing at said storage device information to evidence at least one of an availability, use, and usage of at least one of said television programming, said first instruction signal, and executable code at a subscriber station;

storing at said storage device a second instruction signal which is effective at a subscriber station to generate output information content to be associated with said television programming;

storing at said storage device a second instruction signal which is effective at a subscriber station to display at least one of a combined and a sequential presentation of said television programming and at least one subscriber specific datum;

storing at said storage device a second instruction signal which is capable of enabling a subscriber station to respond to a subscriber reaction inputted by at least one of said computer and a processor;

storing at said storage device a second instruction signal which is capable of enabling a subscriber station to communicate to a remote station a query in respect of information at least one of (i) to be associated with said television programming and (ii) to enable display of said television programming;

storing at said storage device a second instruction signal which is effective to control a subscriber station to receive information to at least one of complete and supplement said television programming;

storing at said storage device a second instruction signal which is effective at a .
subscriber station to process a digital television signal; and

storing at said storage device said at least one of said first code and said first datum to serve as a basis for enabling at least one of (i) an output device to display at least a portion of said television programming and said computer to process said executable code.

98. (Amended) The method of claim 96, wherein said selected at least one first location is in said television signal, said method further comprising the step of:

storing at said storage device concurrently with said television programming and said first instruction signal information that evidences at least one from the group consisting of:

- (1) a title of a television program;
- (2) a [proper] use of programming;
- (3) a transmission station;
- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) an identification of an instruction signal;
- (10) at least one of a source and a supplier of data;
- (11) at least one of a distributor and an advertisement; and
- (12) an indication of [copyright] a payment obligation.

- 99. (Amended) The method of claim 96, wherein said first instruction signal is embedded in said television signal, said method further comprising the steps of: selecting at least one from the group consisting of:
 - (1) a datum that identifies computer software in said television signal;
- (2) [a datum that specifies a method to instruct receiver end equipment on at least one of (i) what specific programming to at least one of select, play and record, (ii) how to load said specific programming on at least one of player and recorder equipment, (iii) when and how to at least one of play and record said specific programming other than immediately, (iv) how to modify said specific programming, (v) which one of equipment, channel and channels to transmit said specific programming on, (vi) when to transmit said specific programming, and (vii) at least one of how and where to one of file, refile and dispose of said specific programming;
 - (3)] a datum that designates an addressed apparatus;
- [(4) a datum that specifies at least one of where, when, and how to locate a signal;
- (5) a datum that informs a processor of a fashion for identifying and processing a signal;
 - (6)] (3) a datum that is part of a decryption code;
- [(7)] (4) a datum to be compared to a communication schedule; and embedding said selected at least one datum in said television signal; and storing said selected at least one datum at said storage device concurrently with said television programming and said first instruction signal.
- 100. (Amended) The method of claim 96, wherein said first instruction signal includes code, said method further comprising the steps of:

selecting at least one second instruction signal, said at least one second instruction signal including at least one from the group consisting of:

- (1) a switch control signal;
- (2) a timing control signal;
- (3) a locating control signal;
- (4) an instruct-to-contact signal that designates a remote receiver station;
- (5) an instruct-to-transfer signal that designates one of broadcast and cablecast programming;
- (6) an instruct-to-delay signal that designates one of broadcast or cablecast programming;
- (7) at least one of an instruct-to-decrypt and an instruct-to-interrupt signal that designates programming and a way to at least one of decrypt and interrupt;
- (8) at least one of an instruct-to-enable and an instruct-to-disable signal that designates an apparatus;
- (9) an instruct-to-record signal that designates at least one of a broadcast and a cablecast program;
 - (10) a control signal that controls a multimedia presentation;
- (11) an instruction signal that governs at least one of a broadcast and a cablecast receiver station environment;
 - (12) an instruct-to-power-on signal that designates a receiver;
- (13) an instruct-to-tune signal that designates at least one of a receiver and a frequency;
 - (14) an instruct-to-coordinate signal that designates at least two apparatus;
- (15) an instruct-to-compare signal that designates at least one of a news transmission and a computer input;
- (16) an identifier signal that causes a computer to instruct a plurality of tuners each to tune to at least one of a broadcast and a cablecast transmission;



- (17) an instruct-to-coordinate signal that designates at least two portions of information and at least one of: (1) an output time and (2) an output place;
 - (18) an instruct-to-generate signal that designates at least one output datum;
 - (19) an instruct-to-transmit signal that designates at least one computer output;
 - (20) an instruct-to-overlay signal that designates at least one television image;
- (21) an instruct-that-if signal that designates a function to perform if a predetermined condition exists;
- (22) an instruct-to-enable-and-deliver signal that designates information that at least one of completes and supplements a television program;
- (23) an instruct-to-transmit signal that designates a computer peripheral [storage] device;
- (24) a code signal that designates at least one datum to at least one of remove and embed;
 - (25) a signal addressed to a receiver station apparatus;
- (26) an instruct-to-store signal that designates at least a portion of a program to be at least one of broadcast and cablecast;
- (27) an instruct-to-transmit signal that designates at least a portion of a program to be at least one of broadcast and cablecast;

embedding said selected at least one second instruction signal in said television signal; and

storing said selected at least one second instruction signal at said at least one storage device concurrently with said television programming and said first instruction signal.

101. (Unchanged) A method of encoding signals to control a presentation comprising the steps of:

receiving and storing a program that contains video information, said video information including at least three full-screen video images to be outputted at a subscriber station in a predetermined sequence;

receiving at least one first instruction which is capable of instructing at least one processor at said subscriber station to at least one of input and respond to a viewer reaction to said program;

encoding said at least one first instruction, said step of encoding translating said at least one first instruction to a control signal, said control signal for directing said at least one processor at said subscriber station; and

storing said control signal from said step of encoding in conjunction with said program.

102. (Unchanged) The method of claim 101, wherein additional program material is to be outputted at said subscriber station to at least one of complete and supplement said program, said method further comprising the step of:

storing a second control signal in conjunction with said program and said control signal from said step of encoding, said second control signal being capable of causing said subscriber station to at least one of (i) query a remote station for said additional program material, and (ii) receive said additional program material in at least one of a broadcast and a cablecast transmission.

103. (Unchanged) The method of claim 101, wherein said control signal from said step of encoding directs said at least one processor to generate a video overlay that is to be coordinated in said presentation with said video information in said program, said method further comprising the step of:

storing a second control signal in conjunction with said program and said control signal, said second control signal capable of causing said subscriber station to perform at

least one of (i) transmitting a combined video signal from said program and said video overlay generated by said at least one processor over a broadcast or cablecast network to a plurality of receiver stations and (ii) outputting at a video display a combined video image of (a) at least a portion of said program and (b) said video overlay generated by said at least one processor.

- 104. (Unchanged) The method of claim 101, further comprising the steps of: receiving at least one second instruction, said at least one second instruction including at least one of the group consisting of:
- (1) an instruction which is capable of enabling said subscriber station to generate output information content to be associated with said program;
- (2) an instruction which is capable of enabling said subscriber station to generate output to be associated with at least one of a product and a service promoted in said presentation;
- (3) an instruction which is capable of enabling said subscriber station to display, in said presentation, at least one of a combined and a sequential output of mass medium programming and at least one subscriber station specific datum;
- (4) an instruction which is capable of enabling said subscriber station to respond to a subscriber reaction inputted by at least one of said at least one processor and a computer;
- (5) an instruction which is capable of enabling said subscriber station to communicate to a remote station a query for information to enable display of said presentation;
- (6) an instruction which is capable of enabling said subscriber station to communicate to a remote station an order for a product or service at least one of (i) promoted in said video information and (ii) based on said viewer reaction;

- (7) an instruction which is capable of enabling said subscriber station to process a digital television signal; and
- (8) an instruction which is capable of enabling said subscriber station to serve as a basis for enabling said at least one processor to process executable code;

encoding said at least one second instruction, said step of encoding translating said at least one second instruction to at least one second control signal, said at least one second control signal for directing said at least one processor; and

storing said at least one second control signal in conjunction with said program.

105. (Unchanged) The method of claim 101, further having at least one step from the group consisting of:

embedding said control signal in a portion of a television signal which is not visible on a normally tuned television set;

embedding code in said program that enables at least one of a computer and a controller to control a presentation of said program in accordance with said control signal;

communicating a program unit identification code and storing said program unit identification code at a storage location associated with said program; and

communicating to and storing at a storage location associated with said program some information to evidence at least one of an availability, use, and usage of said program at said subscriber station.

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106. (Amended) A method of processing signals to control a mass medium programming presentation comprising the steps of:

receiving a signal containing one of a data file and mass medium programming and communicating said signal to a storage device;

receiving at least one first instruction signal which is capable of controlling a subscriber station to one of input and respond to a [viewer] subscriber reaction to

information contained in said signal and to communicate at least a portion of said signal to a transmitter;

communicating said at least one first instruction signal to said storage device; and storing said at least one first instruction signal at said storage device in association with said one of said data file and said mass medium programming.

107. (Amended) The method of claim 106, wherein said [signal] mass medium programming comprises one of video [,] and audio, [and text,] said method further comprising at least one step from the group consisting of:

embedding said at least one first instruction signal in said signal;
embedding a code in [said one of said data file and] said mass medium
programming that enables one of a processor and a computer to one of receive and output
information to supplement [said one of said data file and] said mass medium
programming in accordance with said at least one first instruction signal;

communicating a program unit identification code to said storage device and storing said program unit identification code at a storage location associated with [said one of said data file and] said mass medium programming;

communicating to and storing at said storage device information to be processed at a subscriber station to evidence one of an availability, use, and usage of one of video, audio, and text associated with [said one of said data file and] said mass medium programming;

communicating to and storing at said storage device an instruct signal which is effective at a subscriber station to select [said one of said data file and] said mass medium programming;

communicating to and storing at said storage device an instruct signal which is effective at a subscriber station to generate output to be associated with [said one of said data file and] said mass medium programming;

communicating to and storing at said storage device an instruct signal which is effective to generate output to be associated with one of a product, service, and an information presentation;

communicating to and storing at said storage device an instruct signal which is effective to display one of a combined and sequential presentation of a mass medium program and a subscriber specific datum;

communicating to and storing at said storage device an instruct signal which is effective to process a subscriber reaction to [said one of said data file and] said mass medium programming;

communicating to and storing at said storage device an instruct signal which is effective to one of communicate to a remote station a query in respect of information to be associated with [said one of said data file and] said mass medium programming and to enable display of [said one of said data file and] said mass medium programming;

communicating to and storing at said storage device an instruct signal which is effective to control a subscriber station to receive information to supplement [said one of said data file and] said mass medium programming;

communicating to and storing at said storage device an instruct signal which is effective to process a digital television signal; and

communicating to and storing at said storage device one of a code and a datum to serve as a basis for one of enabling an output device to display at least a portion of [said one of said data file and] said mass medium programming and for enabling a processor to process code.

108. (Amended) The method of claim 106, said method further comprising the steps of:

selecting at least one from the group consisting of:

(1) a datum that identifies computer software in a television signal;

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- (2) [a datum that specifies a method to instruct receiver end equipment on at least one of (i) what specific programming to at least one of select, play and record, (ii) how to load said specific programming on at least one of player and recorder equipment, (iii) when and how to at least one of play and record said specific programming other than immediately, (iv) how to modify said specific programming, (v) which one of equipment, channel and channels to transmit said specific programming on, (vi) when to transmit said specific programming, and (vii) at least one of how and where to one of file, refile and dispose of said specific programming;
 - (3)] a datum that designates an addressed apparatus;
- [(4) a datum that specifies at least one of where, when, and how to locate a signal;
- (5) a datum that informs a processor of a fashion for identifying and processing a signal;
 - (6)] (3) a datum that is part of a decryption code;
- [(7)] (4) a datum to be compared to a communication schedule; and embedding said selected at least one datum in said signal; and storing said selected at least one datum at said storage device concurrently with said at least one first instruction signal.
- 109. (Amended) The method of claim 106, further comprising the step of: storing at said storage device concurrently with said at least one first instruction signal information to evidence one of an availability, use, and usage of said at least one first instruction signal, said evidence information one of designating and identifying at least one of:
 - (1) a mass medium program;
 - (2) a [proper] use of programming;
 - (3) a transmission station;



- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) an instruct signal;
- (10) a source or supplier of data;
- (11) one of a distributor and an advertisement; and
- (12) an indication of [copyright] a payment obligation.
- 110. (Amended) The method of claim 106, wherein said at least one first instruction signal comprises downloadable code, said method further comprising the steps of:

selecting at least one second instruction signal, said at least one second instruction signal including at least one from the group consisting of:

- (1) a switch control instruction;
- (2) a timing control instruction;
- (3) a locating control signal;
- (4) an instruct-to-contact signal that designates a remote receiver station;
- (5) an instruct-to-transfer signal that designates one of broadcast and cablecast programming;
- (6) an instruct-to-delay signal that designates one of broadcast and cablecast programming;
- (7) at least one of an instruct-to-decrypt and an instruct-to-interrupt signal that designates programming and a way to at least one of decrypt and interrupt;
- (8) at least one of an instruct-to-enable and an instruct-to-disable signal that designates an apparatus;



- (9) an instruct-to-record signal that designates at least one of a broadcast and a cablecast program;
 - (10) a control signal that controls a multimedia presentation;
- (11) an instruction signal that governs at least one of a broadcast and a cablecast receiver station environment;
 - (12) an instruct-to-power-on signal that designates a receiver;
- (13) an instruct-to-tune signal that designates at least one of a receiver and a frequency;
 - (14) an instruct-to-coordinate signal that designates at least two apparatus;
- (15) an instruct-to-compare signal that designates at least one of a news transmission and a computer input;
- (16) an identifier signal that causes a computer to instruct a plurality of tuners each to tune to at least one of a broadcast and a cablecast transmission;
- (17) an instruct-to-coordinate signal that designates at least two portions of information and at least one of: (1) an output time and (2) an output place;
 - (18) an instruct-to-generate signal that designates at least one output datum;
 - (19) an instruct-to-transmit signal that designates at least one computer output;
 - (20) an instruct-to-overlay signal that designates at least one television image;
- (21) an instruct-that-if signal that designates a function to perform if a predetermined condition exists;
- (22) an instruct-to-enable-and-deliver signal that designates information that at least one of completes and supplements a television program;
- (23) an instruct-to-transmit signal that designates a computer peripheral [storage] device;
- (24) a code signal that designates at least one datum to at least one of remove and embed;
 - (25) a signal addressed to a receiver station apparatus;

- (26) an instruct-to-store signal that designates at least a portion of a program to be at least one of broadcast and cablecast;
- (27) an instruct-to-transmit signal that designates at least a portion of a program to be at least one of broadcast and cablecast;

embedding said selected at least one second instruction signal in said signal; and storing said selected at least one second instruction signal at said storage device concurrently with said at least one first instruction signal.

111. (Amended) A mass medium programming output apparatus comprising:

an input device for inputting a user reaction to a mass medium programming presentation;

at least one storage device operatively connected to said input device for storing a mass medium programming signal containing (i) mass medium program materials and (ii) at least one embedded instruction signal for a variable time period and outputting said signal;

a control signal detector operatively connected to said storage device for detecting said at least one embedded instruction signal; and

a processor operatively connected to said input device, said at least one storage device, and said control signal detector for processing said input user reaction in response to said at least one embedded instruction signal and for controlling said at least one storage device to output.

112. (Amended) A transmitter station apparatus comprising: an input device for inputting a user reaction to mass medium programming; a transmitter for transmitting information to a remote station;



at least one storage device operatively connected to said transmitter for storing data and at least one instruction signal for a variable time period and communicating said data and said at least instruction signal;

a control signal detector operatively connected to said at least [said] <u>one</u> storage device for detecting said at least one instruction signal; and

a processor operatively connected to said input device, said control signal detector, and said at least [said] <u>one</u> storage device for processing said user reaction in response to said at least one instruction signal and for controlling said at least one storage device to communicate at least one of said data to said transmitter.

113. (Unchanged) The apparatus of claim 112, wherein said transmitter includes a telephone connection, said apparatus further comprising:

an auto dialer operatively connected to said telephone connection for initiating communications with said remote station.

114. (Unchanged) The apparatus of claim 112, wherein said mass medium programming is contained in a signal transmitted from a remote transmitter station, said apparatus further comprising:

a receiver for receiving said signal; and

an output device operatively connected to said receiver for outputting said mass medium programming to said user.

- 115. (Unchanged) The apparatus of claim 114, wherein said control signal detector is operatively connected to said receiver.
 - 116. (Unchanged) The apparatus of claim 112, further comprising:

a second storage device for storing and communicating said mass medium programming; and

an output device operatively connected to said second storage device for outputting said mass medium programming to said user.

117. (Unchanged) The apparatus of claim 116, wherein said control signal detector is operatively connected to said second storage device.

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- 118. (Amended) The apparatus of claim 116, wherein said control signal detector is operatively connected to said input device and said at least one instruction signal [includes] <u>provides</u> said user reaction.
- 119. (Unchanged) The method of claim 96, wherein said selected at least one first location includes a memory location at said at least one storage device and said step of communicating said at least one first instruction signal further comprises:

communicating at least a portion of said at least one first instruction signal to said memory location.

- 120. (Unchanged) The method of claim 119, wherein said at least one storage device contains at least one of a disk and a tape and said memory location is contained within said at least one of said disk and said tape.
- 121. (Unchanged) The method of claim 120, wherein said television signal, said television programming, and said at least one first instruction signal are stored concurrently on one of said at least one of said tape and said disk.

122. (Unchanged) The method of claim 121, wherein only some of an audible portion of said television programming prompts for input of said subscriber reaction, said method further comprising the steps of:

selecting at least one second location to which to communicate said at least said first instruction signal, said at least one second location being within said television signal but outside said audible portion; and

embedding said at least one first instruction signal in said at least one second location.

123. (Unchanged) The method of claim 122, wherein said at least said first instruction signal is embedded in said at least one second location before said television signal is stored, wherein said television programming, and said at least said first instruction signal are stored concurrently on said one of said at least one of said tape and said disk.

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124. (Amended) The method of claim 121, [wherein only a portion of an image portion of said television programming prompts for input of said subscriber reaction, said image portion of said television programming being within the range of said television signal that is displayed on a normally tuned television picture set, said method] further comprising the steps of:

selecting at least one second location to which to communicate said at least one first instruction signal, said at least one second location being within said television signal but outside [said image] a portion containing said video images to be displayed; and

embedding said at least one first instruction signal in said at least one second location.

- 125. (Unchanged) The method of claim 124, wherein said at least one first instruction signal is embedded in said at least one second location before said television signal is stored, wherein said television programming and said at least one first instruction signal are stored concurrently on one of said at least one of said tape and said disk.
- 126. (Unchanged) The method of claim 96, wherein said selected at least one time is before said television signal is stored, wherein said television programming and said at least one first instruction signal are stored concurrently at said at least one storage device.

127. (Amended) The method of claim 126, [wherein only a portion of an audible portion of said television programming prompts for input of said subscriber reaction, said method further] comprising the steps of:

selecting a second location to which to communicate said at least one first instruction signal, said at least one second location being within said television signal but outside [said] an audible portion; and

embedding said at least one first instruction signal in said at least one second location.

128. (Amended) The method of claim 127, wherein said at least one first instruction signal is embedded in said at least one second location [before said television signal is stored, wherein said television programming and said at least one first instruction signal are stored concurrently at said at least one storage device] at said selected at least one time.

129. (Amended) The method of claim 126, [wherein only a portion of an image portion of said television programming prompts for input of said subscriber reaction, said image portion of said television programming being within the range of said television signal that is displayed on a normally tuned television picture set, and wherein said selected at least one first location is within said television signal but outside said image portion, said method] further comprising the step of:

selecting at least one second location to which to communicate said at least one first instruction signal, said at least one second location being within said television signal but outside a portion containing said video images to be displayed; and

embedding said at least one first instruction signal in said selected at least one first location.

- 130. (Amended) The method of claim 129, wherein said at least one first instruction signal is embedded in said selected at least one first location [before said television signal is stored, wherein said television programming and said at least one first instruction signal are stored at said at least one storage device] at said selected at least one time.
- 131. (Unchanged) The method of claim 96, wherein said selected at least one first location includes a second location in said television signal and said step of communicating said at least one first instruction signal further comprises the step of:

embedding at least a portion of said at least one first instruction signal in said second location in said television signal.

132. (Unchanged) The method of claim 131, wherein said at least one storage device includes a plurality of storage locations, at least a portion of said television programming is communicated from a first of said plurality of storage locations to a

second of said plurality of storage locations, and said step of storing further comprises the step of:

storing said television signal, said television programming, and said at least one first instruction signal at said second of said plurality of storage locations concurrently.

- 133. (Unchanged) The method of claim 132, wherein said at least one storage device includes a plurality of storage devices, a first of said plurality of storage devices contains said first of said plurality of storage locations, and a second of said plurality of storage devices contains said second of said plurality of storage locations.
 - 134. (Unchanged) The method of claim 133, further comprising the step of: selecting at least one of said plurality of storage devices.
- 135. (Unchanged) The method of claim 132, wherein said television signal, said television programming, and said at least one first instruction signal are stored concurrently at said first of said plurality of storage locations.
- 136. (Unchanged) The method of claim 132, wherein said at least one storage device further comprises a network having a plurality of stations, a first of said plurality of stations containing said first of said plurality of storage locations, and a second of said plurality of stations containing said second of said plurality of storage locations.



137. (Amended) The method of claim 136, wherein <u>said step of</u> <u>communicating comprises a function performed by</u> at least one of said plurality of stations [performs said step of communicating said at least one first instruction signal] based on a schedule.